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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09,526,955	03/16/2000	Meral Bradley Woodberry	SMT 391	1607

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EXAMINER

NGUYEN, VINH P

ART UNIT PAPER NUMBER

2829

DATE MAILED: 01/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/526,955

Applicant(s)

WOODBERRY, MERAL BRADLEY

Examiner

VINH P NGUYEN

Art Unit

2829

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 November 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other.

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1. Claims 10,15-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 10, it is unclear how the power source layer, an insulation layer and a ground layer are related to the step of optically stimulating the optically sensitive device. What are their functions. In claim 15, it is unclear how a light control signal, a multi-filter mask, a light channel controller, a fiber optic block, a heating device and a temperature control device are interrelated and associated with each other. In claim 16, it is unclear how a parabolic reflector, a liquid crystal display panel, wavelength filter, computer, fiber optic bundle, heating coil are interrelated and associated with each other.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1,4-9,11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spaziani et al (Pat # 5,631,571).

As to claims 1,4-5,7-9,11,13 and 14, Spaziani et al disclose a wafer test apparatus as shown in figure 2 having a wafer (100) with a plurality of integrated circuits formed thereon, each of the integrated circuit having an optically sensitive device (203) electrically connected to

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a component (204,206) and a probe card with plurality of probes (116) extending through an aperture for electrically contacting the components (206,204). Spaziani et al do not mentioned about connecting the wafer to an electrical source. However, it would have been obvious for one of ordinary skill in the art to recognize that the integrated circuit is connected to an electrical source through one of the probes (116) so that there is electrical signal flowing through the wafer and this signal is measured by probes through the probes (116). Furthermore, it appears that Spaziani et al also suggest that a fiber bundle as shown in figure 2b is also used in transmitting light beams to the optically sensitive device (203). As to claims 2-3, it appears that current flow direction would depend on the polarity of the supplied power source. As to claim 11, It would have been obvious for one of ordinary skill in the art to recognize that the integrated circuit is connected to an electrical source through the probes (116) and one of these probes has to be connected to a ground. As to claims 6 and 12, it appears that the technique of using a filter mask for allowing passage of a light beam through appears to be well known in the art.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claims 1-4 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ridgway (Pat # 4,770,483).

As to claim 1, Ridgway discloses in figure 10 a conventional photodiode circuit having a component (36), an optically sensitive device (33) electrically connected to the component (36), an electrical source (V Bias) electrically connected to the optically sensitive device (33). According to Ridgway, a light beam optically stimulates the optically sensitive device (33) so as to allow current to flow through the sensitive device from the electrical source to the component so as to exercise the component. It would have been obvious for one of ordinary skill in the art to have the photodiode circuit of Ridgway formed on an integrated circuit since the technique of placing electrical component on an integrated circuit is old and well known. As to claim 2, it appears that the current flow is a positive current flow to the component since the applied power signal from the electrical source (V bias) is positive. As to claim 3, it appears that current flow direction would depend on the polarity of the supplied power source (V bias). As to claim 4, the sensitive device is a diode. As to claim 8, the use of fiber optic bundle for transmitting the light beam to a diode is also well known in the art.

6. Applicant's arguments filed on 11/07/2002 have been fully considered but they are not persuasive.

Applicant argued that the device of Spaziniani does not use the optical input to turn on and off the electrical power to the device to determine if the electrical properties of the device

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are functioning properly. Examiner disagreed with Applicant about this issue.

It appears that Spaziniani uses the optical input to test the electrical components. During that time, the optical input signal stimulate the electrical components and there are electric current flow within those components in order to obtain electrical test signals (See column 2, lines 54-57). When there is no applied optical input, there is no electrical power within the device.

7. Claim 17 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VINH P. NGUYEN whose telephone number is (703) 305-4914.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4900.

  
VINH P. NGUYEN  
PRIMARY EXAMINER  
ART UNIT 2829  
01/16/2003